



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/519,480

12/30/2004

Junghee Ryu

GK-US045298

2848

22919 7590 12/23/2008
GLOBAL IP COUNSELORS, LLP
1233 20TH STREET, NW, SUITE 700
WASHINGTON, DC 20036-2680

EXAMINER

TRUVAN, LEYNNA THANH

ART UNIT

PAPER NUMBER

2435

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/519,480 | Applicant(s) RYU, JUNGHEE | |
| | Examiner Leynna T. Truvan | Art Unit 2135 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 4-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4 was elected by applicant without traverse.

Claims 5-17 are now cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rub, et al. (US 6,404,573) in view of Lo (US 5,408,424).**

As per claim 1:

Rub discloses an authentication time-variant code which can be read out by a machine, said time-variant code being one-dimensional and two-dimensional code **(col.1, lines 15-20 and col.10, lines 44-55)**, wherein shape, position, tone, brightness of code pattern or combination of the shape, position, tone, brightness of the code pattern vary according to time and wherein a predetermined information is contained in code pattern variation. **(col.9, lines 31-45 and col.15, lines 30-48; time-varying as the claimed time-variant)**

However, Rub does not include two dimensional code.

Lo discloses an invention for processing a discrete-time measurement process for the purpose of estimating a discrete-time signal process. A vector is an element of finite dimensional Euclidean space. A scalar is one dimensional vector and a vector valued variable is either a single dimensional or a multiple dimensional variable. A sequence index is called time (col.7, lines 15-25 and col.39, lines 1-11).

Therefore, it would have been obvious for a person of ordinary skills in the art to combine Rub with Lo to teach time variant code being one dimensional and two dimensional code for this is processing discrete time measurement which is vector-valued function of time describing or affecting the time-variant property of the signal and measurement process (Lo - col.7, lines 15-25 and col.39, lines 1-11).

As per claim 2: See Rub on col.2, lines 35-41; discloses the authentication time-variant code of claim 1, wherein a limited numbers of static patterns vary randomly.

As per claim 3: See Rub on col.10, lines 8-15; discloses the authentication time-variant code of claim 1, wherein static patterns vary with order as time goes.

As per claim 4: See Rub on col.10, lines 1-7; discloses the authentication time-variant code of claim 1, using change of time-variation timing when static patterns vary.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leynna T. Truvan whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. T. T./
Examiner, Art Unit 2135
/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435